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(71)Applicant : TOYODA GOSEI CO LTD
AKASAKI ISAMU
AMANO HIROSHI

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(72)Inventor : OKAZAKI NOBUO
MANABE KATSUHIDE
AKASAKI ISAMU
AMANO HIROSHI

(54) GALLIUM NITRIDE GROUP COMPOUND SEMICONDUCTOR LASER DIODE

(57)Abstract:

PURPOSE: To obtain a blue laser.

CONSTITUTION: A gallium nitride group compound semiconductor laser diode having, at least, one p-n junction where a p-layer 5 consisting of a gallium nitride group compound semiconductor showing the n-type conductivity $(Al_xGa_{1-x})_yIn_{1-y}N:0 \cdot x \cdot 1.0 \cdot y \cdot 1$ and a p-type layer 5 consisting of a gallium nitride group compound semiconductor showing the p-type conductivity $(Al_xGa_{1-x})_yIn_{1-y}N:0 \cdot x' \cdot 1.0 \cdot y' \cdot 1$ ($x=x'$ or $x \neq x'$, $y=y'$ or $y \neq y'$) are joined. Since it is succeeded to generate a gallium nitride group compound semiconducto

